

REMARKS

ALLOWABLE SUBJECT MATTER

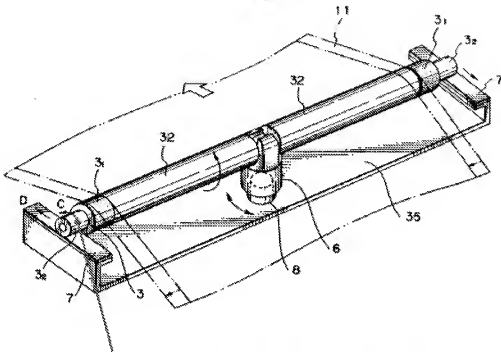
Applicants note with appreciation that claims 38-40 are allowed. Claims 62 and 64 were indicated as being allowable if rewritten as independent claims to include the limitations of the base claim and any intervening claims.

CLAIM REJECTIONS- 35 U.S.C § 103

Claims 49-52, 56, 57 and 67-68 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miyajima (US 5,276,460) in view of Labesky (US 5,833,776). For the reasons set forth below, Applicants respectfully traverse this rejection.

Miyajima indicates a sheet 11 positioned upon an idler 32. Idler 32 includes a larger portion 3₁ having a diameter of D₁ and a smaller portion 3₂ having a smaller diameter D₂. More specifically, D₁ > D₂. See Miyajima at Col. 2, line 54 to Col. 3, line 7. As shown in FIG. 2, sheet 11 is not positioned upon portion 3₂, which is the part of idler 32 that has a smaller diameter D₂ (and, therefore, the smaller radius). For the Examiner's convenience, FIG. 2 of Miyajima is repeated on the next page with an arrow for clarity:

Fig. 2



Sheet 11 is not positioned on the portion with diameter D2.

In contrast to Miyajima, independent claim 49 of the present application requires a flexible belt that is “positioned upon the portion of the rotatable roll body having a radius of r_1 ” where “radius r_1 is less than radius r_2 .” Similarly, independent claim 67 requires a friction ring carried on a portion of a rotatable roll body having a radius r_1 which is less than the radius r_2 of an axially adjacent portion. In summary, because Miyajima does not carry sheet 11 on the smaller radius portion 3₂ it does not disclose the above referenced limitations of Applicants’ claim 49 and claim 67. Labesky does not cure this deficiency. Therefore, Applicants respectfully request that the rejection of claims 49-52, 56, 57 and 67-68 be withdrawn and said claims be allowed to issue.

In addition to the above and with regard to Applicants’ claims 50 and 51, Labesky does not teach connection of its ends by a radial or non-axial movement. In fact, FIGS. 1 and 2 of

Labesky that are cited by the Office Action clearly demonstrate that the ends 20 and 22 of body 10 are joined by moving the ends together along the circumferential (non-radial) direction of body 10 and inserting element 26 into opening 24 by an axial movement. In fact, radial movement of ends 20 and 22 would move these ends apart – not together for connection.

Applicants' claim 51 also requires hooks. No hooks are shown in FIGS. 1 or 2 of Labesky. At best, Labesky's FIGS. 1 and 2 illustrate a tongue and groove type connection.

With regard to Applicants' claim 52, the Office Action does not identify the basis for rejection of this claim.

With regard to Applicants' claim 56, Miyajima cannot be modified by Labesky to create a friction ring for driving a spool where the friction ring conforms to the curvature of the spool. Miyajima does not even teach a friction ring but instead indicates a sheet 11 that crosses an idler 32 rather than driving a spool. As such, sheet 11 does not conform to the curvature of idler 32 and modifying Miyajima in such manner would completely change the manner of operation of Miyajima's idler 32 using only the present application in hindsight as a basis for doing so.

With regard to Applicants' claims 53-55 and 58, the Office Action indicates these claims are rejected as unpatentable over Miyajima in view of Labesky (Office Action at Page 4). However, in the explanation set forth for this rejection, the Office Action refers to "the belt of Smith". Accordingly, the basis for this rejection remains unclear. In addition, claim 58, for example, requires that a pair of hooks is attached to the flexible belt and that the belt is constructed from a material that is more elastic than the material used for constructing the hooks. No such limitation is found in the cited references or identified in the Office Action.

Applicants' new claim 69 is patentable over Miyajima (US 5,276,460) in view of Labesky for reasons previously stated above with regard to independent claim 67. In addition,

Labesky does not include a joint that is parallel to the axial direction or connectors that extend along the width of the flexible belt. In addition, Miyajima (US 5,276,460) in view of Labesky does not disclose a flexible belt.

Claims 60, 63, and 66 were rejected under 35 U.S.C. §103(a) as being unpatentable over Burke et al. (US 5,507,226) in view of Labesky (US 5,833,776). However, neither of these references discloses a belt having two ends that are configured for connection or separation from each other by displacement of one end relative to the other along a radial direction of the rotatable roll body. Burke et al. does not disclose a belt having ends. Labesky's ends cannot be separated by movement along the radial direction and, instead, requires movement along the axial direction. For clarity, FIG. 2 of Labesky is provided below with the addition of arrows showing the axial and radial direction.

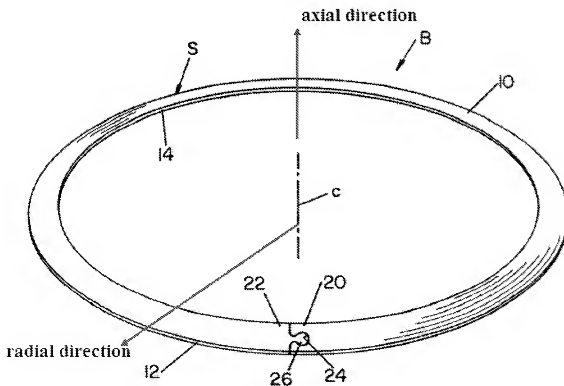


FIG. 2

In order to disconnect Labesky's ends 20 and 22, one or both of these ends must be moved along the axial direction. Movement along the radial direction will not separate Labesky's ends 20 and 22. In fact, if Labesky's ends 20 and 22 could be separated by radial movement as suggested by the Office Action, then body 10 could not function as a Belville spring because compression along the axial direction would simply pop ends 20 and 22 open.

The Office Action attempts to improperly dismiss the limitation of "two ends that are configured for connection or separation from each other by displacement of one end relative to the other along a radial direction of the rotatable roll body" by asserting that such is directed to manner of employment. However, this limitation is a structural limitation regarding how the ends of the flexible belt must be constructed – not a manner of use limitation. Applicants respectfully submit that the preamble of the claim already sets forth the manner of use.

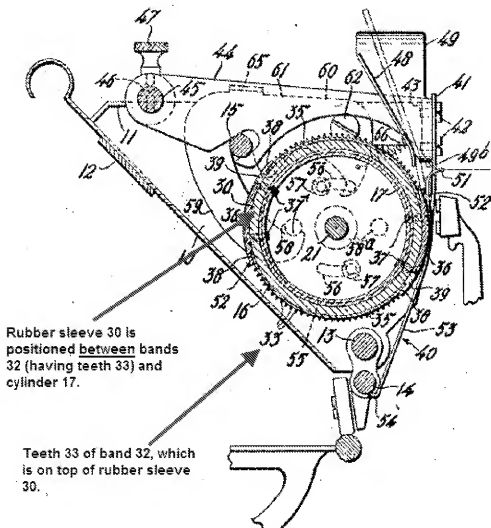
Accordingly, Applicants respectfully traverse this rejection and request that claims 60, 63, and 66 be allowed.

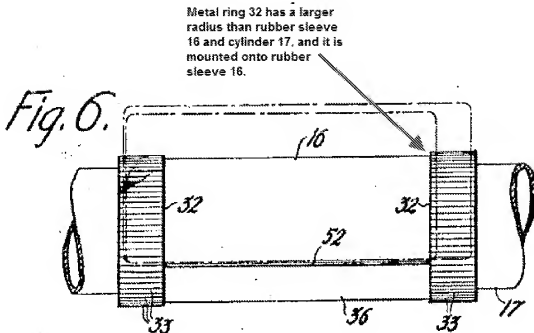
Finally, claims 61 and 65 were rejected under 35 U.S.C. §103(a) as being unpatentable over Burke et al. (US 5,507,226) in view of Labesky (US 5,833,776) in further view of Smith (US 1,554,253). However, Applicants respectfully submit that dependent claims 61 and 65 are patentable over these references for the same reason as set forth above with regard to independent claim 60. In addition, the Office Action at page 7 asserts that Smith "teaches the axial position of the at least one belt is maintained by differences in the radius of the rotatable roll body." Smith does not disclose a flexible belt located on a portion of a roll body having a radius r_1 that is less than a radius r_2 of another portion of that roll body. Instead, Smith is directed to a type writing machine that has cylinder 17 of constant radius over its length as shown in Figs 1-7. As shown in Smith's Figs. 3, 4, 6, and 7 and described at page 2, line 112 to

page 3, line 38, cylinder 17 is equipped with a rubber sleeve 30 that is mounted onto cylinder 17.

Clearly, rubber sleeve 30 must then have a radius larger than cylinder 17. In turn, metal rings 32 are mounted onto rubber sleeve 30 as shown in Figs. 3 and 6.

Fig. 3.





Accordingly, Smith's metal rings 32 are not mounted on portion of cylinder 17 (or even sleeve 16) having a radius r_1 that is less than another portion having a larger radius of r_2 . To the contrary, Smith's metal rings 32 are mounted on the largest radius possible because rubber sleeve 16 is located between rings 32 and cylinder 17 as shown in Figs. 3 and 6. Accordingly, the position of Smith's metal rings 32 is not maintained by differences in the radius of cylinder 17 or any other rotatable body. In contrast, Applicants' claim 61 requires a belt that is mounted onto a roll body with its position maintained by differences in the radius of the rotatable roll body. Accordingly, Applicants respectfully submit that the claims are allowable and the rejection should be withdrawn.

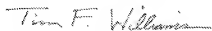
Therefore, Applicants respectfully submit that all pending claims should be allowed. If any other fee or extension of time is required to obtain the entry of this response, the undersigned

hereby petitions the Commissioner to grant any necessary time and extension and authorize its charging deposit account no. 04-1403 for any such fee not submitted herewith.

The Examiner is respectfully requested to contact the undersigned if any issues remain after this amendment. Thank you.

Respectfully submitted,

DORITY & MANNING, P.A.



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